

Application no. 10/725,235

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A filter for use with a fuel cell comprising:
an inlet, an outlet and a medium made from perfluorinated sulfonic acid polymer and disposed between the inlet and the outlet, wherein fuel exiting the filter contains less metal ions than fuel entering the filter, wherein the perfluorinated sulfonic acid polymer is substantially similar to the polymer exchange membrane in the membrane-electrode assembly of the fuel cell.

Claim 2 (original): The filter of claim 1 being connectable to a fuel supply.

Claim 3 (original): The filter of claim 1 being positioned in a fuel supply.

Claim 4 (original): The filter of claim 1 being connectable to a fuel cell.

Claim 5 (original): The filter of claim 1 being positioned in a fuel cell.

Claim 6 (original): The filter of claim 1 being positioned in an electronic device powered by a fuel cell.

Claim 7 (original): The filter of claim 1 further comprising a housing encasing the medium.

Claim 8 (original): The filter of claim 1, wherein the perfluorinated sulfonic acid polymer medium is shredded.

Claim 9 (original): The filter of claim 1, wherein the perfluorinated sulfonic acid polymer medium is in the form of ingots.

Application no. 10/725,235

Claim 10 (original): The filter of claim 1, wherein the perfluorinated sulfonic acid polymer medium is made into a textile web.

Claim 11 (original): The filter of claim 10, wherein the textile web is a nonwoven web.

Claim 12 (original): The filter of claim 10, wherein the textile web is a woven web.

Claim 13 (original): The filter of claim 1, wherein the perfluorinated sulfonic acid polymer medium is made into powder form.

Claim 14 (original): The filter of claim 1, wherein the medium is wetted before use.

Claim 15 (original): A fuel supply for a fuel cell comprising:
an outer casing containing fuel with a first amount of ions therein, and
an ion filter supported by the casing, said ion filter is in fluid communication with said fuel;

wherein upon flowing said fuel through said ion filter, the fuel exiting the ion filter has a second amount of ions less than said first amount of ions.

Claim 16 (original): The fuel supply of claim 15, wherein the ion filter includes discrete pieces of filter material.

Claim 17 (original): The fuel supply of claim 15, wherein the filter material comprises perfluorinated sulfonic acid polymer that is substantially similar to the polymer exchange membrane in the membrane electrode assembly of the fuel cell.

Claim 18 (original): The fuel supply of claim 15, wherein the filter material is shredded.

Application no. 10/725,235

Claim 19 (original): The fuel supply of claim 15, wherein the filter material is wetted before use.

Claim 20 (currently amended): A perfluorinated sulfonic acid polymer filter medium adapted to attract metal ions from fuel usable in a fuel cell and from liquid byproduct produced in the fuel cell, wherein the filter medium is substantially similar to the polymer exchange membrane in ~~the membrane-electrode assembly of the fuel cell,~~ and wherein the filter medium is positioned within the fluidic flow path related to the fuel cell.

Claim 21 (original): The perfluorinated sulfonic acid polymer filter medium of claim 20, wherein the filter medium is placed in a fuel supply.

Claim 22 (original): The perfluorinated sulfonic acid polymer filter medium of claim 20, wherein the filter medium is placed in a mixing chamber.

Claim 23 (original): The perfluorinated sulfonic acid polymer filter medium of claim 20, wherein the filter medium is placed in a byproduct chamber.